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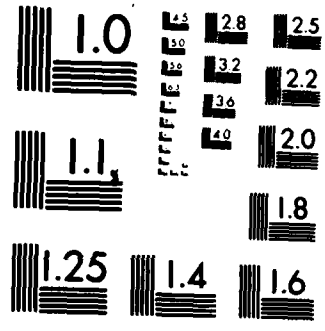

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DIFFERENCES IN PATIENT AND PROVIDER ASSESSMENTS OF SATISFACTION ASSOCIATED WITH TREATMENT MODALITY

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Differences in Patient and Provider Assessments of Satisfaction Associated with Treatment Modality

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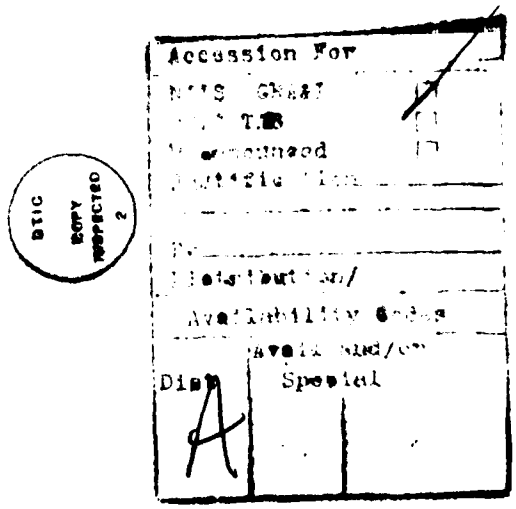

Abstract

Differences between family practice and nonfamily practice health care service delivery have been characterized in terms of patient satisfaction. Since health care providers guide their behaviors on the basis of conceptions of what is satisfying for patients, a clarification of the degree of congruence between patient self-reports and provider impressions seemed appropriate. Responses to four patient satisfaction scales were obtained from 136 providers and 1,735 patients in both family practice and nonfamily practice locations. Results of separate multiple discriminant analyses conducted between settings for both provider and patient groups indicated that providers emphasized trust and range of services as hallmarks of family oriented care. Patients, alternatively, emphasized accessability of services, while range of services was not relevant to differentiating between treatment modalities.

The design employed did not require respondents to make comparative judgments. Therefore, the nonreactive nature of the data analyzed allowed for an unbiased estimation of the factors both patients and providers emphasize as characterizing family-oriented health care. While interpersonal rapport (trust) and continuity of care (broad range of services) are important features of family care, these apparently are not, in the view of health care consumers, exclusive to that modality. Consequently, these results suggest that, regardless of treatment modality, organizational development geared to improve patient access systems is most likely to have a direct and positive impact on patient satisfaction.

Differences in Patient and Provider Assessments of Satisfaction Associated with Treatment Modality

One of the major consequences of the upsurge in patient satisfaction research has been to vindicate continued promotion of a shift away from population-oriented health care delivery toward a more family-oriented approach. The family practice movement within hospitals and clinics advocates an ongoing relationship between a primary care provider and the members of entire family units. The resultant assessments of patient satisfaction associated with such an approach are viewed as key factors in enhancing provider-patient rapport.[1] Health care providers assume that such rapport is beneficial, both in ensuring more accurate diagnosis and in providing effective health education through higher quality two-way communication.[2] Enhanced rapport has also been viewed as a means for achieving continuity of follow-up care,[3] and for improving treatment compliance and speed of recovery through increased trust.[4,5]

An additional outcome of the family practice movement has been stimulation of a more diligent effort throughout the health care professions to modify one's professional behavior in a manner consistent with enhanced patient satisfaction. Despite the fact that provider perceptions ultimately guide and shape the provider's own behavior, few studies have examined whether patient self-reports of satisfaction bear any resemblance to provider perceptions of patient satisfaction. One such study[6] reported differences between provider and patient rankings of the importance of scientific knowledge and technical skill with respect to quality of care assessments. Other investigators[7] also used ranking of single items to identify provider-patient differences, indicating that patients differed in satisfaction with (a) how rushed they felt during the treatment process and (b) the level of thoughtfulness of the providers themselves. Generally speaking, however, both of the above-mentioned studies employed either small samples or weak methodology, and thus they did not accurately reflect the potential available in studying perceptual differences in patient and provider assessments of satisfaction.

In sum, researchers have typically permitted providers to define patient satisfaction dimensions without examining whether patient priorities may in fact differ from those assumed by providers. The nature and degree of perceptual

convergence/divergence between providers and patients may generate useful information regarding differences in the effects that various treatment modalities may have on patient satisfaction and, perhaps, therapeutic outcome.[8] Additionally, knowledge of how provider perceptions differ from those of patients could suggest ways to become more responsive to patient needs. Thus, the purpose of the present study was to (a) explore more fully perceptual differences in provider and patient-based assessments of satisfaction in large, outpatient samples, and (b) determine differences in such perceptions attributable to mode of treatment delivery (i.e., family practice versus a traditional primary care orientation).

Method

Subects

The sample consisted of providers and patients at either of two small U.S. Navy hospitals. One facility employed a family practice approach to providing outpatient health care services; the other provided primary care in a more traditional fashion on an as-requested basis. Both facilities were similar in size, range of services offered, organizational structure, staffing and type of patient served (i.e., generally young, active duty military personnel and their dependents). From the family practice facility, 947 outpatients seeking treatment at the main hospital and 70 providers working at the same location were sampled over a two-week period. From the nonfamily practice facility, 788 outpatients and 66 providers were sampled during a comparable two-week period. The sample excluded providers assigned to the respective facilities for a period of time less than 90 days as well as patients who had never received treatment at another military health care facility. This helped to ensure adequate familiarity and sophistication among the respondents.

Procedure

Provider and patient participation was voluntary, and cooperation for both groups exceeded 85%. Providers completed a 24-item perceived patient satisfaction questionnaire in small group sessions during normal working hours as part of a larger study of their work environment. Patients completed the same 24-item questionnaire before leaving the hospital following the completion of their visit.

The satisfaction items themselves were drawn from a wide variety of sources in the literature and were guided by input from health care professionals employed at other naval medical facilities. Specific aspects of satisfaction included

access to care, range of services available, care quality, and technical and interpersonal characteristics of the providers. Respondents were asked to indicate their level of satisfaction on a five-point Likert-type scale. Response choices ranged from "Very Dissatisfied" to "Very Satisfied."

Four a priori scales were formed, each composed of items which fell conceptually into categories suggested by Ware and Snyder.[9] These categories included: (a) patient trust (i.e., the amount of satisfaction the patient associates with confidence in the provider; 4 items), (b) provider respect (i.e., satisfaction associated with the level of courtesy and consideration shown by providers; 5 items), (c) accessability of services (i.e., satisfaction associated with the time it takes to receive treatment; 4 items), and (d) range of services (i.e., satisfaction with the variety and availability of service; 5 items). The final four scales were thus based on only 18 items; six items were deleted for failure to conform to one of the a priori categories or for possessing poor psychometric quality. Estimates of internal consistency reliability (i.e., coefficient alpha) were computed separately for patients and providers. All estimates exceeded .80, except in the provider samples where the range and accessability of services scales were an acceptable .73 and .76, respectively.

Results

In order to determine modality differences (i.e., family practice versus nonfamily practice) in provider and patient perceptions of service satisfaction, separate discriminant analyses were conducted on the provider and patient samples. Discriminant analysis produces weighted combinations of variables (discriminant functions) that reflect maximum differences between designated groups. In addition to providing an overall test of significance, discriminant functions simplify interpretation of between-group differences by indicating the degree of dependence among the variables.

The discriminant analysis results for patients are shown in Table 1. As expected, all four patient satisfaction scale scores were significantly higher among family practice patients in both the multivariate and univariate sense. Inspection of the standardized discriminant function loadings indicates that accessability of services was most critical in differentiating family practice-nonfamily practice differences, range of services was least important to differentiation on the basis of satisfaction, while patient trust and provide respect (i.e., how the provider comes across interpersonally) were equipotent in

Table 1

Results of Multiple Discriminant Analysis of Patient-Based Satisfaction Assessment

Satisfaction Measures	Nonfamily Practice (N = 788) M	Standardized Discriminant Function Loadings	Family Practice (N = 947) M	F	p
a. Patient Trust	3.73	.33	4.19	132.2	.001
b. Provider Respect	3.77	.32	4.20	134.8	.001
c. Range of Services	3.55	.00	3.93	108.8	.001
d. Accessability of Services	3.44	.43	3.89	124.0	.001
Classification[1]	55.1%		70.0%		
Canonical R	.29	X^2 (4) = 148.5, p < .001			

[1]Overall classification = 62.6%

Table 2

Results of Multiple Discriminant Analysis of Provider-Based Satisfaction Assessments

Satisfaction Measures	Nonfamily Practice (N = 66) M	Standardized Discriminant Function Loadings	Family Practice (N = 70) M	F	p
a. Patient Trust	3.45	.53	3.86	18.51	.001
b. Provider Respect	3.43	-.19	3.79	12.35	.001
c. Range of Service	3.16	.51	3.59	19.98	.001
d. Accessability of Services	2.82	.32	3.31	14.99	.001
Classification[1]	63.6%		71.4%		
Canonical R	.41	X^2 (4) = 23.70, p < .001			

[1]Overall classification = 67.5%

differentiating between treatment modalities. Put more simply, family practice clinic patients were more satisfied overall, the dimension most affected by treatment modality being accessablity to the provider. Of secondary importance was how patients perceived providers interpersonally. Satisfaction with the range of services provided at each facility was not an effective discriminator between family practice and nonfamily practice modalities, which is consistent with the fact that both facilities were essentially identical on this attribute.

Table 2 contains the discriminant analysis results for providers. As was the case with patients' self-reported satisfaction, the level of perceived patient satisfaction reported by providers in the family practice facility was significantly higher ($p < .01$) than the level reported by providers in the nonfamily practice setting. Inspection of the discriminant loadings, however, showed that providers had a different conception of how the two treatment modalities affect patient satisfaction. Briefly, analysis of provider responses indicated that trust and range of services were equipotent and most important in differentiating between modalities, accessability was of secondary importance, and provider respect was not relevant to distinguishing between family practice and nonfamily practice treatment modalities.

Finally, it was interesting to note that in both family practice and nonfamily practice facilities, provider perceptions of patient satisfaction were consistently lower than actual, patient-based satisfaction responses. When mean comparisons were made for overall satisfaction, these within facility provider-patient differences were found to be statistically significant ($t = 5.31$, $p < .001$ and $t = 4.03$, $p < .001$ for family practice and nonfamily practice, respectively). At other than the aggregate level, inspection of the mean values contained in Tables 1 and 2 indicated that comparable differences existed for each of the satisfaction subscales as well. The greatest differences occurred in the area of accessability, and the smallest patient-provider differences were found for patient trust.

Discussion

In keeping with the results of previous research, patient perceptions of satisfaction were found to be significantly higher in a family practice-oriented setting than in a nonfamily practice setting.[10] While providers in the family practice clinic also reported significantly higher levels of perceived patient satisfaction than did their nonfamily practice counterparts, providers in both

treatment settings consistently underestimated the level of satisfaction reported by patients. This finding is in accord with previous work indicating that patient reports of satisfaction are generally very high.[11,12]

Interestingly, however, the factors which distinguished between treatment modalities were dissimilar between providers and patients. Briefly, from the patient's perspective, accessability of services provided the greatest degree of discrimination between family practice and nonfamily practice groups. Satisfaction with trust and respect also contributed significantly to between groups discrimination, although at a reduced level. The potency of accessability of services as a discriminator between family practice and nonfamily practice is a particularly noteworthy effect because the general public (a) places a high value on access[13] and (b) generally reports less satisfaction with access than with technical aspects of treatment.[14] Provider-based responses, on the other hand, revealed that range of services and patient trust formed the basis for maximum discrimination, while accessability proved to be a significant factor, but of somewhat lower magnitude.

Generally speaking, these results should not be construed as detracting from the popular emphasis on promoting interpersonal trust and respect advocated by family practitioners. It is clear from inspection of the scale means shown in Table 1 that from a patient's perspective, the family practice facility scored significantly higher on all dimensions of satisfaction with care. However, the satisfaction dimension which most distinguished between treatment modalities was accessability of care. Such findings are consistent with the fact that patient evaluations often center on the manner in which services are delivered rather than the nature or variety of services themselves.[15] As one author noted, the value patients attach to accessability may simply reflect a feeling that the family practice physician represents a responsive ally within the larger context of the health care bureaucracy.[13] The potential validity of this "responsive ally" interpretation is enhanced by the fact that patient trust and provider respect were both equally important discriminating dimensions from the patient's point of view.

At the provider level, it would be misleading to conclude that range of services is perceived as more important than interpersonal manner (in this case provider respect). The analysis demonstrated that providers perceived patient satisfaction with range of services to be coequal with trust in differentiating

between modalities, despite the fact that both facilities were nearly identical in range of services offered. This finding stands in marked contrast to that of patients, whose data do not support the importance of range of services in distinguishing between modalities.

A difference such as this may serve to highlight the contrasting nature of provider and patient roles in primary care. The provider role logically emphasizes responsiveness to patient health care needs. One of the major ways in which a provider can enhance responsiveness is through expanded range of services. Since family practitioners are specially prepared to provide a broad range of services, it is not surprising that they scored themselves higher on range of services in this study. On the other hand, the patient role centers on obtaining prompt relief from symptoms. In a hospital or clinic setting, access to relief-giving care is controlled not by the patient, but by the health care organization. As members of the organization, providers have ready access to patients, and may, therefore, fail to recognize that the reverse is not also true.

Finally, and unlike the results of earlier studies,[6,7] the ranking of the importance a particular satisfaction dimension might have in the current study was based on the unique amount of variance accounted for by a composite of items rather than by employing a comparison of mean rankings or first choices of items themselves. This approach reduced the effects of method variance associated with requesting patients (or providers) to prioritize their satisfaction with care when they may not conceive of their health care needs in such a manner. In addition, the research presented here does offer some substantial differences from earlier designs examining patient satisfaction and modality of treatment. It accomplished this by including both patient and provider perceptions, in a between group and between modality comparison, using multivariate analyses that could tease out important and unanticipated effects of treatment modality on patient satisfaction.

Although the results of the current study tended to support earlier reports based on ranked findings, the expanded scope and improved methodology associated with the findings reported above do permit more articulate and generalizable inferences about the nature of those differences as affected by treatment modality. Rather than simply underscoring the fact that providers and patients differ in perceptions regarding family practice and nonfamily practice satisfaction assessments, such inferences additionally provide the opportunity to improve an understanding of factors which influence overall patient satisfaction and, ultimately, policy concernin health care service delivery.

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